

In the Claims

1. (Currently Amended) A videophone system, comprising:

a cable television system headend, the cable television system headend is operative to control the routing of videophone calls within a cable television system;

a plurality of subscriber terminals connected to said headend via a first transmission medium, said subscriber terminals being adapted to receive a cable television signal over said first transmission medium, said cable television signal including compressed digitized videophone signals and compressed digitized television signals corresponding to respective television programs, said subscriber terminals being adapted to:

identify, select and receive said compressed digitized videophone signals and said compressed digitized television signals,

transmit compressed digitized videophone signals over the first transmission medium, and

provide at least one viewer with at least a portion of television pictures corresponding to said compressed digitized television signals;

a first videophone terminal ~~external to and~~ operationally connected to a first of said subscriber terminals via a second transmission medium that is different from said first transmission medium, said first videophone terminal being adapted to receive a first compressed digitized videophone signal from said first subscriber terminal over said second transmission medium, said first videophone terminal being further adapted to produce and transmit a second compressed digitized videophone signal to the first subscriber terminal over the second transmission medium;

a camera associated with said first videophone terminal, said camera providing video images to said first videophone terminal, the first videophone terminal being adapted to produce said second compressed digitized videophone signal from said video images; and

at least one display device associated with said first videophone terminal, said display

device displaying at least a portion of a decompressed video signal corresponding to said first compressed digitized videophone signal.

2. (Previously Amended) The videophone system of Claim 1, wherein said first transmission medium comprises hybrid fiber coax.

3. (Previously Amended) The videophone system of Claim 1, wherein said camera is a digital video camera providing the video images in digital form to the first videophone terminal.

Claims 4-9 (Canceled)

10. (Previously Amended). The videophone system of Claim 62, wherein said first videophone terminal is further adapted to receive a signal from a remote control unit responsive to providing the notification, said signal from said remote control unit corresponding to input from a user, said input from the user corresponding to an acceptance or declination of the incoming videophone call.

11. (Previously Amended) The videophone system of Claim 1, wherein said headend is coupled to a remote network via a third transmission medium to enable said compressed digitized videophone signals to be transported between the headend and said remote network.

12. (Previously Amended) The videophone system of Claim 1, wherein a plurality of videophone terminals are operationally connected to said first subscriber terminal via said second transmission medium.

13. (Previously Amended) The videophone system of Claim 1, wherein the second transmission medium providing the connection between the first videophone terminal and the first subscriber terminal

comprises a communication channel from the group: Ethernet, firewire, and a universal serial bus.

14. (Previously Amended) The videophone system of Claim 1, wherein said second transmission medium is a local area network.

Claim 15. (Canceled)

16. (Previously Amended) The videophone system of Claim 1, wherein said headend is adapted to receive said second compressed digitized videophone signal from said first videophone terminal in a first format over said first transmission medium and convert said second compressed digitized videophone signal from said first format to a second format, said headend further adapted to transmit said second compressed digitized videophone signal in said second format to a second videophone terminal wherein said second format is different from said first format.

Claim 17-36 (Canceled)

37. **(Currently Amended)** A videophone system, comprising:

a cable television system headend, the cable television system headend is operative to

control the routing of videophone calls within a cable television system;

a plurality of set-top terminals connected to said headend via a first transmission medium, said set-top terminals being adapted to receive a cable television signal over said first transmission medium, said cable television signal including compressed digitized videophone signals and compressed digitized television signals corresponding to respective television programs, a first set-top terminal in said plurality of set-top terminals being adapted to:

identify, select, and receive said compressed digitized videophone signals and said compressed digitized television signals responsive to user input with a first control device;

transmit compressed digitized videophone signals over said first transmission medium, output to a first television at least a portion of television pictures corresponding to the decompressed form of said compressed digitized television signals, and output to the first television at least a portion of the decompressed form of said compressed digitized videophone signals;

a first videophone unit operationally connected to said first set-top terminal, said videophone unit being adapted to:

receive a first compressed digitized videophone signal received by said first set-top terminal over said first transmission medium, provide at least a portion of the first compressed digitized videophone signal in decompressed form, the first set-top terminal being adapted to output to the first television at least a portion of the decompressed form of the first compressed digitized videophone signal, and produce a second compressed digitized videophone signal, the first set-top terminal being adapted to transmit the second compressed digitized videophone signal produced by the first videophone unit over the first transmission medium; and

a camera associated with said videophone unit, said camera providing video images to the

first videophone terminal, the first videophone unit being adapted to produce the second compressed digitized videophone signal from said video images.

38. (Previously Amended) The videophone system of Claim 37, wherein the output of the first set-top terminal to the first television is over a second transmission medium, and wherein said camera provides the video images to the first videophone unit over a third transmission medium different from said second transmission medium.

39. (Previously Amended) The videophone system of Claim 37, wherein said videophone unit resides internal to the first set-top terminal and is operationally connected to the first set-top terminal by at least one electrical interface.

40. (Previously Amended) The videophone system of Claim 37, wherein a second videophone unit is operationally connected to the first said set-top terminal via a second transmission medium.

41. (Previously Amended) In a cable television system including a cable television system headend, the cable television system headend is operative to control the routing of videophone calls within the cable television system, a videophone system comprising:

a cable modem terminal connected to said headend via a first transmission medium, said cable modem being adapted to transmit and receive packetized digital data over said first transmission medium, said packetized data including compressed digitized videophone signals electronically addressed to at least one videophone unit and digitized data for display different than said compressed digitized videophone signals, said cable modem terminal being adapted to identify, select, transmit, and receive said compressed digitized videophone signals and said digitized data for display;

the at least one videophone unit operationally connected to said cable modem terminal via a

second transmission medium different than the first transmission medium, said videophone unit being adapted to exchange said compressed digitized videophone signals with said cable modem terminal over said second transmission medium;

a camera associated with said videophone unit, said camera providing video images to the at least one video phone unit for producing a corresponding compressed digitized videophone signal by the at least one videophone unit; and

a first display device associated with said at least one said videophone unit for displaying at least a portion of the decompressed form of said compressed digitized videophone signals; and

a second display device for displaying at least a portion of a first digitized data for display received by said cable modem terminal over said first transmission medium.

42. (Previously Amended) The videophone system of Claim 41, wherein said digitized data for display includes at least one of digital video, MPEG formatted data, and IP formatted data.

43. (Previously Amended) The videophone system of Claim 41, wherein the second transmission medium providing the connection between the at least one videophone unit and the cable modem device comprises a communication channel from the group: Ethernet, firewire, and a universal serial bus.

44. (Original) The videophone system of Claim 41, wherein a plurality of videophone units are connected to said cable modem.

45. (Previously Amended) The videophone system of Claim 41, wherein the second transmission medium providing the connection between the at least one videophone terminal and the cable modem device comprises a wireless communication channel.

46. (Previously Amended) In a cable television system including a headend, a plurality of

subscriber terminals, and a first videophone unit, a method for transporting compressed digitized videophone signals and compressed digitized television signals corresponding to respective television programs as a multiplexed packetized cable television signal over a cable television system, comprising the steps of:

transmitting a first compressed digitized videophone signal from said first videophone unit to a first subscriber terminal over a second transmission medium, said second transmission medium operationally connecting the first videophone unit to the first subscriber terminal,

transmitting the first compressed digitized videophone signal from the first subscriber terminal to said headend over a first transmission medium different than the second transmission medium;

at said headend receiving and processing the first compressed digitized videophone signal based on packet identification;

transmitting the first compressed digitized videophone signal from the headend to a second electronic address that is different than the electronic address corresponding to the first subscriber terminal;

receiving in said headend a second compressed digitized videophone signal originated at the second electronic address ;

at said headend packetizing and processing the second compressed digitized videophone signal based on packetized identification;

transmitting from the headend to the first subscriber terminal the second compressed digitized videophone signal and said compressed digitized television signals corresponding to respective television programs as a first multiplexed packetized cable television signal;

receiving at the first subscriber terminal the second compressed digitized videophone signal and at least a portion of said compressed digitized television signals corresponding to respective television programs over the first transmission medium;

transmitting the second compressed digitized videophone signals from the first subscriber terminal to the first videophone unit over the second transmission medium; and

outputting by the first subscriber terminal to a television at least a portion of television pictures corresponding to the decompressed form of said compressed digitized television signals.

47. (Previously Amended) The method of Claim 46, further comprising the step of:

outputting to the television at least a portion of the decompressed form of the second compressed digitized videophone signal.

Claim 48. (Canceled)

49. (Previously Amended) The method of Claim 46, further comprising the steps of:

transmitting from said first videophone unit at least a portion of the decompressed form of the second compressed digitalized videophone signal to a display device operatively connected to said first videophone unit for display.

50. (Previously Amended) The method of Claim 46, wherein headend processing a compressed digitized videophone signal includes identifying an electronic address corresponding to a respective subscriber terminal.

51. (Previously Amended) The method of Claim 50, wherein said electronic addresses are internet protocol addresses.

Claims 52-53. (Canceled)

54. (Previously Amended) The method of Claim 46, wherein headend processing a compressed digitalized videophone signal includes assessing a billing charge to the first subscriber terminal.

Claims 55-56. (Canceled)

57. (Previously Amended) The videophone system of Claim 1, wherein said cable television signal including said compressed digitized videophone signals and said compressed digitized television signals is carried from the headend to said subscriber terminals over the first transmission medium as a multiplexed packetized data stream.

58. (Previously Amended) The videophone system of Claim 1, wherein said cable television signal further includes analog video signal corresponding to respective television programs and said subscriber terminal are further adapted to receive the analog video signals and provide the at least one viewer with at least a portion of television pictures corresponding to said analog television signals.

Claim 59. (Canceled)

60. (Original) The videophone system of Claim1, wherein said camera provides the video images to the first videophone terminal over a third transmission medium.

61. (Original) The videophone system of Claim3, wherein said camera is internal to the first digital videophone.

62. (Original) The videophone system of Claim 1, wherein the the first videophone terminal is further adapted to provide a notification of an incoming videophone call associated with the first compressed digitized videophone signal prior to receiving the first compressed digitized videophone signal.

63. (Original) The videophone system of Claim 1, wherein the first subscriber terminal is further adapted to receive the first compressed digitized videophone signal only after determining that the first compressed digitized videophone signal is associated with an internet protocol address assigned to the first videophone terminal.

64. (Original) The videophone system of Claim 1, wherein the first subscriber terminal is further adapted to receive the first compressed digitized videophone signal only after determining that the first compressed digitized videophone signal is associated with an internet protocol address corresponding to the first subscriber terminal.

65. (Original) The videophone system of Claim 1, wherein the second transmission medium providing the connection between the first videophone terminal and the first subscriber terminal comprises a wireless communication channel.

66. (New) The videophone system of Claim 1, wherein a second viewer is provided with a portion of television pictures corresponding to compressed digitized television signals.